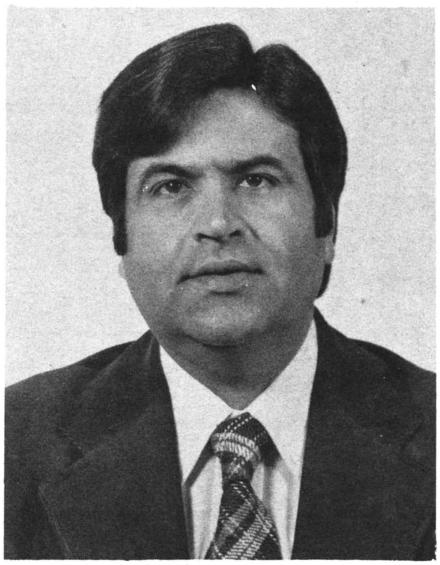
PLAY METER

UPDATE EDITION

Volume 4, Number 12 **June 30, 1978**

Two industry execs resign



Satish Bhutani

Bhutani joins Namco

Satish Bhutani has joined Namco Ltd., a manufacturer of arcade games.

Bhutani, who had served as vice president of marketing for Project Support Engineering (P.S.E.) for two years, is now in charge of opening a Namco America office by the end of June. He will also be in charge of setting up sales and distributing channels in the United States.

Namco has introduced in the U.S. market F-1, which was marketed by Atari, and Shootaway.

Further details and the address of Namco America will be released at a later date.

Walsh leaves Mirco

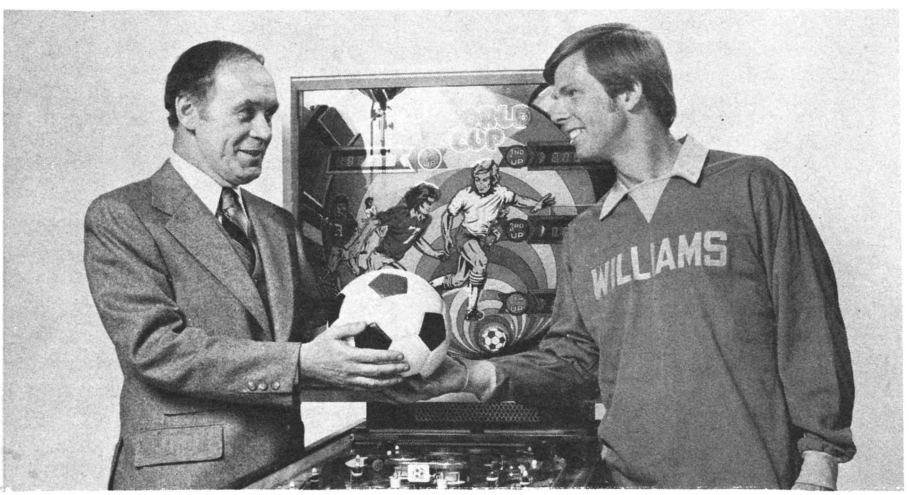
John L. Walsh resigned last month as president and as a director of Mirco, Inc.

In his statement he said, "In January 1977, the board of directors asked me to resume the duties of president and gave me certain objectives to meet. These objectives have been met. Mirco has returned to operating on a currently profitable basis."

As previously reported, Mirco has completed negotiations for the divestiture of its systems business and is now in final negotiations for the sale of its electronic distributor business. The remaining business is the manufacture and marketing of amusement devices which has been the company's major product line.

There is no other management change. Richard N. Raymond is vice president—European operations and has his office at the company's plant in New Isenburg, West Germany. At the Company's Phoenix plant are Eugene K. Lew, director of engineering, G.H. Swanson, vice president—finance, Robert R. Tiffany, vice president—operations, and Bernard Shapiro, sales manager.

An operating committee—consisting of Lew, Swanson, and Tiffany (who is chairman)—is in charge of the domestic business. This committee reports to the executive committee of the board of directors as does Raymond. According to a spokesman for the board of directors, the operating committee will function until Walsh's successor assumes office.



James Hughes, executive vice president and chief operating officer of XCOR International, Williams Electronics' parent company, officially welcomes soccer star Kyle Rote Jr. to the Williams team. Rote is assisting Williams in promoting the firm's new solid state flipper game World Cup *which introduces a dual electronic sounds system and memory features.*

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Update in Atari's Interchangeability Chart

There has been an update with minor changes in the chart outlining the interchangeability of pinball manufacturers' coils with Atari devices. The outdated chart appeared in PLAY METER's Update Edition for May 26.

This information is based on current games from the manufacturers; so it is possible there may be other coils from older equipment that would work. However, without adequate testing on a particular part, Atari cannot recommend random replacement.

It is important that all the footnotes be read and heeded.

On all coils listed below (except Bally coil #AQ-25-500/34-5050) diodes must be replaced with 1N4005 diodes before installing these coils in Atari machines. Before removing coil from Atari machine identify harness wire connected to coil terminal on the striped (cathode) end of diode. Connect this wire to similar terminal on replacement coil.

INTERCHANGEABILITY CHART WITH ATARI DEVICES

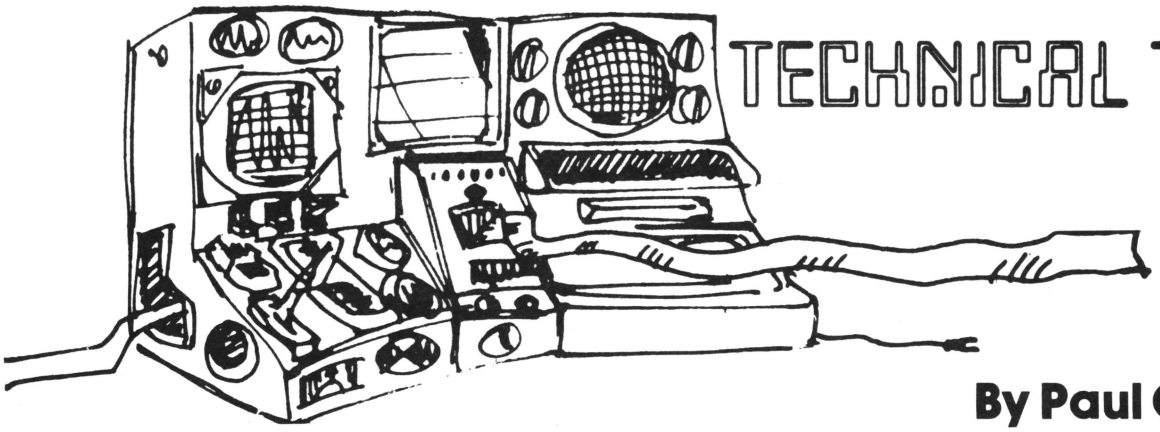
ATARI DEVICE	MANUFACTURER / Part Number			
	GOTTLIEB	BALLY	STERN	WILLIAMS
Flipper†	***	AQ-25-500/ 34-5050 #	***	***
Sling Shot	A-5195	AN-26-1200	J-25-1050	G-25-1100
Thumper Bumper	A-5195‡	AN-26-1200 ‡	J-25-1050	G-25-1100
Drop Target	***	***	J-25-1050	G-25-1100

 # Not necessary to replace diodes, but the coil is wound opposite therefore when installing it in Atari machine swap the harness wires *going to the two outer terminals of the coil. May not be used for an extended period because it is likely to shorten life of the flipper button switch*

† Interchange only with Atari part no. A020470-01 (Orange wrapper) coil. DO NOT REPLACE the retrofit flipper coil (Red wrapper) Atari part no. A020498-01 with any other coil

‡ Thumper Bumper action will be noticeably weak

****DO NOT USE—Tested and found unacceptable for use in Atari machines*



TECHNICAL TOPICS

By Paul Crankshaw
of Electronic Amusement Service

Learning logic circuits

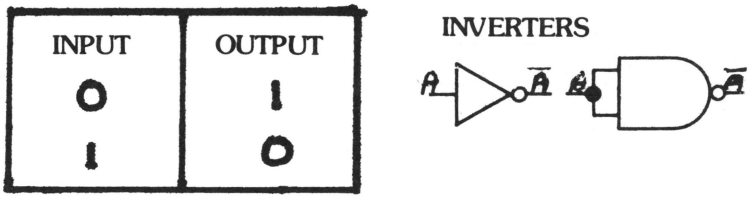


Figure 1

All your digital equipment, from *Pong* to *Sea Wolf II* to the electronic pin games, are constructed from a few basic circuits. The microprocessor games have other more complex circuits but still use many of the basic circuits. Once you learn the basic logic circuits you will be able to understand and determine the operation or detect the non-operation of the digital game.

A logic circuit performs some specific logic functions on binary data. Binary data is information in the form of O's and 1's. A logic 0 is a lo or ground and a logic 1 is a hi or +5 v. level. A logic data may be termed as A or $\overline{A}$. (or 1H or $\overline{1H}$); a signal name may mean anything, but single letters are easier for examples. Data A is generally an originating data signal; $\overline{A}$, pronounced A or A NOT, is its complement.

Data A can be a 1 or a 0 or pulsing data. Data that has been ANDED together is represented as A•B or $\overline{A \bullet B}$. Data that has been ORED is represented as A+B or $\overline{A + B}$. Signal names with a • between them is the result of ANDing, and signal names with a + between them is the result of ORing. A truth table is a chart that shows all possible input states and the resulting outputs of a logic circuit.

The simplest logic circuit is the inverter or NOT circuit. The output of an inverter is always the opposite or the complement of its input. If the input is A the output is $\overline{A}$, if the input is $\overline{A}$ the output is A.

An inverter has one input and one output that is its complement. The circuit symbol itself is the triangle while the circle on the output designates the inverter (Figure One). The same symbol (the triangle) without the circle would be a buffer where the output would be the same as the input.

The AND gate (Figure 2A) is a multiple input device that has an active H1 or 1 output when all the inputs are Hi. The truth table shows that any LO or 0 on any input will result in a LO out, and only a H1 on all inputs will give a 1 out. The same is true for an AND gate with more than the two inputs shown. The NAND gate (Figure 2B) output is exactly opposite that of the AND gate. Both inputs must be a 1 for an active LO out. Simply it would be an AND gate whose output goes through an inverter.

Where the AND gate can be represented mechanically by two switches in series, the OR gate can be represented by two parallel switches. The OR gate device will have an active Hi output when anyone of its inputs is an active H1. Only when both A and B inputs are a LO will the output be a low. The more common NOR device again operates exactly opposite the OR gate as can be seen by comparing the truth tables of Figures 2C and 2D.

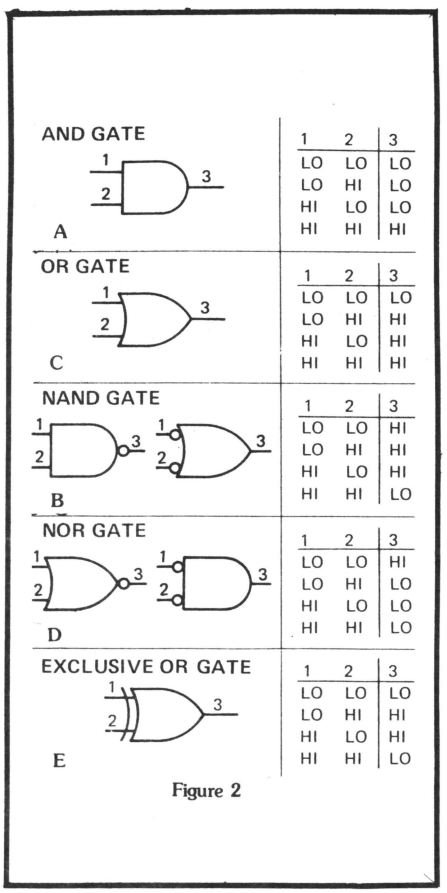


Figure 2

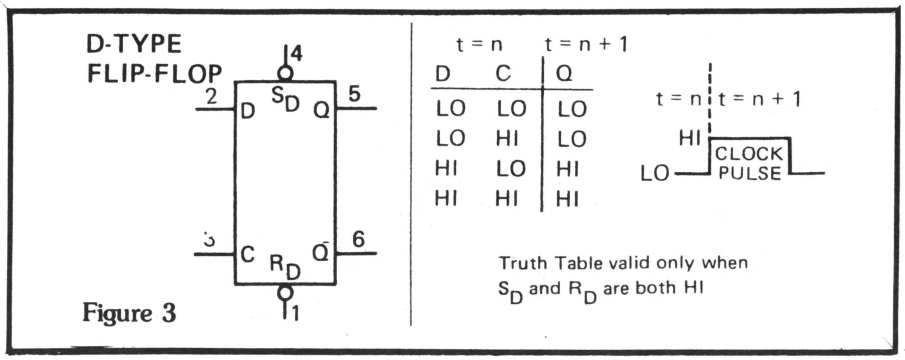


Figure 3

t = n		t = n + 1
D	C	Q
LO	LO	LO
LO	HI	LO
HI	LO	HI
HI	HI	HI

Truth Table valid only when S_D and R_D are both HI

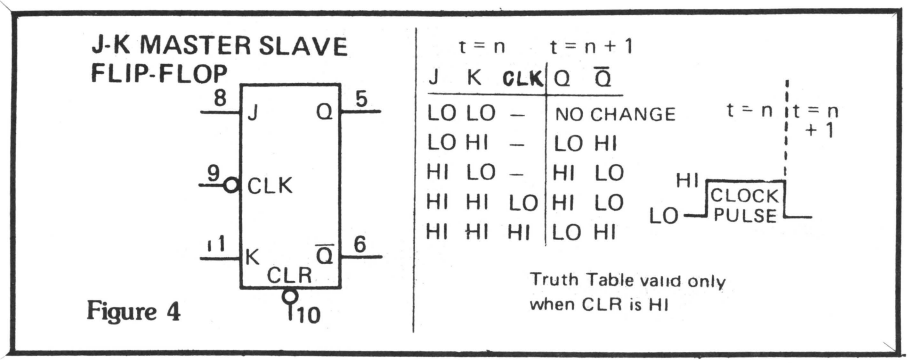


Figure 4

t = n			t = n + 1	
J	K	CLK	Q	$\overline{Q}$
LO	LO	–	NO CHANGE	
LO	HI	–	LO	HI
HI	LO	–	HI	LO
HI	HI	LO	HI	LO
HI	HI	HI	LO	HI

Truth Table valid only when CLR is HI

The exclusive OR gate is used extensively in video games. The truth table of Figure 2E shows that the exclusive OR gate has a H1 output when anyone but not both of the inputs is a H1. If both inputs are a LO or a H1 the output is a LO.

Flip Flops

A flip flop is a digital logic device used to store one bit of binary data. It has two stable states, one representing a binary 0. The flip flop is the basic logic element used in sequential logic circuits. The primary characteristic of a sequential circuit is memory. Such circuits are used for a variety of storage, counting and timing operations.

The two outputs of a flip flop are Q and its complement $\overline{Q}$. The state of the Q or normal output tells you the state of the flip flop. If Q is a 1 the flip flop is set, if it is a 0 the flip flop is reset.

D-type flip flop

The D-type flip flop has two inputs. The D input is where you apply the bit to be stored. The C or CLK controls the flip flop. It is used to determine whether the input data is recognized or ignored. If the CLK line is Hi the data on D is stored and present at the Q output. If C is Lo, the D data is ignored and the bit stored previously is retained. As long as the CLK input is Hi, the Q output will follow the D input.

This operation of the D flip flop is only valid as long as the Preset and Clear control lines are Hi. A Lo on the preset causes Q to go Hi and remain there. A Lo on the clear line causes Q to go Lo. The Q output will be the complement of Q. The present and clear inputs predominate over all other inputs. (Figure Three).

J-K flip flop

The J-K flip flop is really two flip flops in one, where one FF feeds the other. This arrangement is called a masterslave flip flop. The master flip flop is the input circuit where the input signals are applied. The slave flip flop in the J-K circuit provides the output signals and the slave gets its inputs from the master. A clock pulse controls both master and slave flip flops (Figure Four).

If both the J and K inputs are Lo, the clock impulse will have no effect on the outputs; they will remain in their previous states. When the J and the K inputs are at opposite logic levels, regardless of which input is Hi and which is Lo, the negative going edge of the clock signal will transfer the J input bit to the Q output and the K bit to the $\overline{Q}$ output. In effect this input configuration, both Hi, makes the JK flip flop a divide by 2 counter. As with the D type flip flop the clear input must be a H1. A Lo on clear forces and holds Q Lo and $\overline{Q}$, its complement, H1.

Counters

There are a wide variety of counters used in games today. Basically a counter is nothing more than a series of flip flops. A four-bit counter for instance would have four JK flip flops in series. The input data would be fed to the first CLK input and the Q output of each stage acts as the clock of each succeeding flip flop stage. The J and K inputs are at a H1 level which makes each flip flop stage a divide by 2 counter. Only the Q output of each of the four flip-flop stages are used. Each output will be one half the output frequency of the preceding stage (Figure Five).

There are many other more complex logic circuits used in games. A good TTL Data Book will show the operation of each of the different types that you may need to know. The next article will deal these circuits and some of the more complex circuits from a troubleshooting standpoint rather than how they operate.

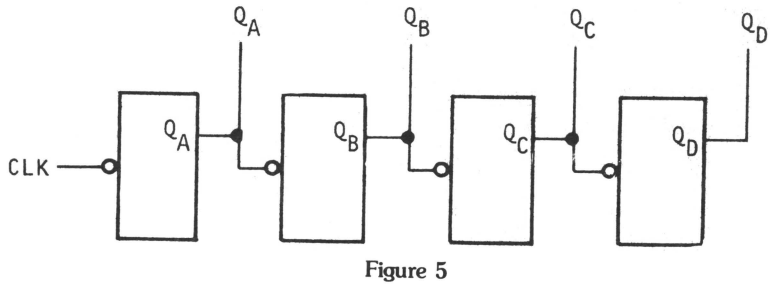
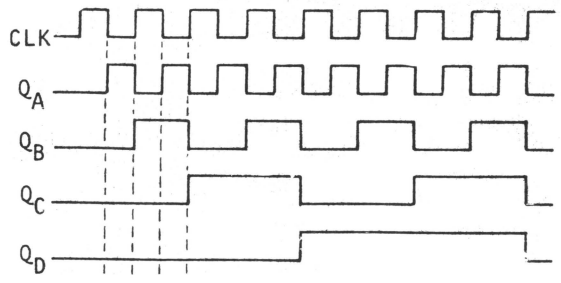


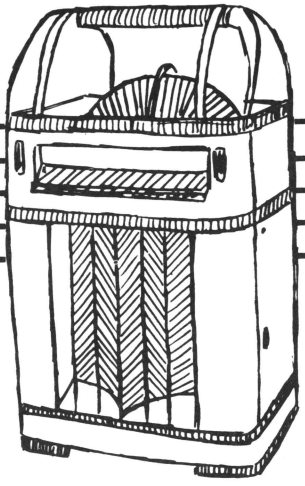
Figure 5

A SIMPLE COUNTER



Music Programming

By Pat Matthews
WQUE New Orleans



On the Ranch

Back at the ranch, here I am again with the creme de la creme. Rising to the top and to the occasion (in that order) is, I find, a trifle easier during the summers. I've turned 26 and don't really feel a year older. But let's get on with the business at hand before these following tunes get any older.

Runaway—Jefferson Starship—Grunt JB-11274

Some more "Earth" music from the West Coast legends. Open another bottle of Dom Perignon and sip slowly while escaping into this smooth and easy ballad which is almost as exquisite as the liquid refreshment. It has all the characteristics of a Starship enterprise: Marty Balin's easily recognizable lead vocals and the fluid guitar styling of Paul Kantner. From "Miracles" to "Count On Me" and now to "Runaway," the progression is evident. But where to now? "It's a runaway hit," he said with tongue-in-cheek. (A-Pop) (A-MOR)

We Really Must Believe in Magic—Jack Clement—Elektra E-45474-B

You really have to check the label to make sure this isn't Gordon Lightfoot. Sounding a lot like the Canadian balladeer, Jack Clement (who?) comes on strong with this impressive debut disk. It's an easy surrealistic tune with great vocals out front and effective, if not unusual female backing. Could do well. (A-MOR) (B-Pop)

Got a Feeling—Patrick Juvet—Casablanca NB 924 D

It's light disco with a Mamas & Papas "feel" to it. A fine horn and string arrangement highlight the song—it's certainly not the lyrical content ("got a feelin' that I won't be needin' you"). Juvet is a newcomer to the Casablanca fold, who seems to sign everybody and unfortunately, anybody. It's produced by Jacques Morali who also does the Village People ("Macho Man") and therefore should do well in discos. (A-Disco)

Prove It All Night—Bruce Springsteen—Columbia 3-10763

"How can I tell radio stations that this is what Springsteen's been doing for the last three years?" That quote was made by a record promoter who shall remain nameless. However after another listen, I conclude it's a typical macho exercise in music and besides Bruce Springsteen's following will like anything he does, this being *no* exception. And of course, it *has* been three-plus years since Mr. Springsteen has blessed his following with anything and even "Born To Run" gets old. Get ready, Bruce is out to "prove it" again! (A-Pop)

You Don't Love Me Anymore—Eddie Rabbitt—Elektra E-45488-A

A love ballad and not the kickin' country stylings one would expect from Mr. Rabbitt (I find that hard to type with a straight, let us say, key). It's one heck of a pretty tune and it's all about a love lost as the title implies. Eddie Rabbitt seems to be following other country singers (Dolly Parton, Ronnie Milsap, etc) in the cross over brigade and should fare well with this single. (A-C&W) (C-Pop) (A-MOR)

This Year's Girl—Elvis Costello—Columbia 3-10762

It probably took me longer than anyone else to realize this Briton with the fifties haircut is for real. The days of a cult following could soon be over for Elvis (Jeez) with this catchy bouncy rocker. There are definite Beatles flavorings and in some parts Costello sounds like the Dave Clark (how refreshing). With the right *push* by Columbia it could go far. (B-Pop)

Stay—Jackson Browne—Asylum E-45485-A

Culled from the super selling "Runnin' On Empty" live lp, Jackson Browne seems to have another "Crowd pleaser," so to speak, with this one. Complete with falsetto voice, this medium tempo re-make should zoom up the charts. Bear in mind, that the *single* "Runnin' On Empty" was (and still is) Jackson's biggest selling single since "Doctor My Eyes" and that was many moons ago. "Stay" is a nice sentimental follow-up. (A-Pop)

Freeway Song—Vicki Sue Robinson—RCA JH 11280

"I guess you just have to be able to relate to freeways to get into this one." That's what I was thinking to myself before listening. Then as the song progressed I found that it's not about bumper-to-bumper traffic at all. No, it's a beautiful love ballad that simply relates being in love to being "free." It's sort of breezy with flowing vocals by Ms. Robinson who certainly "Turned the Beat Around" on this one. (B-Pop) (A-R&B) (A-MOR)

WORTH A LISTEN

Cheatin'—Rubicon—20th Century Fox
Three Times A Lady—Commodores—Motown
Who Turned You On—Wilson Pickett—Big Three
Under The Boardwalk—Bear—RCA
This Magic Moment—Richie Furay—Asylum
Flying Over America—Fresh Aire—Atlantic
Anytime—Journey—Columbia

RECORD WORLD SINGLES CHART

JUNE 17	JUNE 10	TITLE, ARTIST, Label, Number, (Distributing Label)	WKS. ON CHART
1	1	**SHADOW DANCING** ANDY GIBB RSO 893 (3rd Week)	10
2	2	**YOU'RE THE ONE THAT I WANT** JOHN TRAVOLTA AND OLIVIA NEWTON-JOHN/RSO 891	12
3	5	**IT'S A HEARTACHE** BONNIE TYLER/RCA 11249	13
4	8	**BAKER STREET** GERRY RAFFERTY/United Artists 1192	10
5	7	**USE TA BE MY GIRL** O'JAYS/Phila. Intl. 8 3642 (CBS)	9
6	3	**WITH A LITTLE LUCK** WINGS/Capitol 4559	12
7	6	**FEELS SO GOOD** CHUCK MANGIONE/A&M 2001	21
8	4	**TOO MUCH, TOO LITTLE, TOO LATE** JOHNNY MATHIS/DENIECE WILLIAMS/Columbia 3 10693	14
9	10	**YOU BELONG TO ME** CARLY SIMON/Elektra 45477	9
10	13	**THE GROOVE LINE** HEATWAVE/Epic 8 50524	8
11	12	**DANCE WITH ME** PETER BROWN/Drive 6269 (TK)	16
12	14	**LOVE IS LIKE OXYGEN** SWEET/Capitol 4549	17
13	16	**TWO OUT OF THREE AIN'T BAD** MEATLOAF/Epic/Cleveland Intl. 8 50513	14
14	18	**STILL THE SAME** BOB SEGER & THE SILVER BULLET BAND/Capitol 4581	6
15	17	**TAKE A CHANCE ON ME** ABBA/Atlantic 3457	9
16	9	**ON BROADWAY** GEORGE BENSON/Warner Bros. 3542	15
17	19	**BECAUSE THE NIGHT** PATTI SMITH/Arista 0318	11
18	21	**BLUER THAN BLUE** MICHAEL JOHNSON/EMI-America 8001	7
19	22	**EVERY KINDA PEOPLE** ROBERT PALMER/Island 100	12
20	11	**THE CLOSER I GET TO YOU** ROBERTA FLACK (WITH DONNY HATHAWAY)/Atlantic 3463	18
21	15	**BABY HOLD ON** EDDIE MONEY/Columbia 3 10663	18
22	24	**EVEN NOW** BARRY MANILOW/Arista 0330	7
23	25	**OH WHAT A NIGHT FOR DANCING** BARRY WHITE/20th Century 2365	9
24	28	**YOU'RE THE LOVE** SEALS & CROFTS/Warner Bros. 8551	7
25	30	**MISS YOU** ROLLING STONES/Rolling Stones 19307 (Atl.)	4
26	27	**HEARTLESS** HEART/Mushroom 7031	11
27	32	**LAST DANCE** DONNA SUMMER/Casablanca 926	5
28	20	**IMAGINARY LOVER** ATLANTA RHYTHM SECTION/Polydor 14459	17
29	36	**ONLY THE GOOD DIE YOUNG** BILLY JOEL/Columbia 3 10750	5
30	39	**WONDERFUL TONIGHT** ERIC CLAPTON/RSO 895	6
31	31	**I WAS ONLY JOKING** ROD STEWART/Warner Bros. 8568	8
32	35	**FOLLOW YOU, FOLLOW ME** GENESIS/Atlantic 3474	8
33	37	**I CAN'T STAND THE RAIN** ERUPTION/Ariola 7686	14
34	47	**RUNAWAY** JEFFERSON STARSHIP/Grunt 11274 (RCA)	4
35	57	**COPACABANA (AT THE COPA)** BARRY MANILOW/Arista 0339	2
36	38	**ALMOST SUMMER** CELEBRATION FEATURING MIKE LOVE/MCA 30891	9
37	33	**CHEESEBURGER IN PARADISE** JIMMY BUFFETT/ABC 12359	9
38	48	**GREASE** FRANKIE VALLI/RSO 897	3
39	53	**LOVE WILL FIND A WAY** PABLO CRUISE/A&M 2048	3
40	46	**STONE BLUE** FOGHAT/Bearsville 0325 (WB)	5
41	23	**NIGHT FEVER** BEE GEES/RSO 889	20
42	52	**KING TUT** STEVE MARTIN/Warner Bros. 8577	5
43	45	**IT'S THE SAME OLD SONG** KC & THE SUNSHINE BAND/TK 1028	6
44	49	**ROLL WITH THE CHANGES** REO SPEEDWAGON/Epic 8 50545	6
45	59	**MY ANGEL BABY** TOBY BEAU/RCA 11250	6
46	26	**THIS TIME I'M IN IT FOR LOVE** PLAYER/RSO 890	15
47	41	**STAY** RUFUS/CHAKA KHAN/ABC 12349	10
48	40	**DISCO INFERNO** TRAMMPS/Atlantic 3389	18
49	29	**DEACON BLUES** STEELY DAN/ABC 12355	11
50	51	**DANCE ACROSS THE FLOOR** JIMMY 'BO' HORNE/SHE 1003 (TK)	14
51	62	**FM (NO STATIC AT ALL)** STEELY DAN/MCA 40894	3
52	72	**LIFE'S BEEN GOOD** JOE WALSH/Asylum 45493	2
53	53	**DARLIN'** PAUL DAVIS/Bang 736	5
54	55	**YOU GOT IT** DIANA ROSS/Motown 1442	6
55	67	**STAY** JACKSON BROWNE/Asylum 45485	3
56	60	**TAKE ME BACK TO CHICAGO** CHICAGO/Columbia 3 10737	5
57	61	**WARM RIDE** RARE EARTH/Prodigal 0640 (Motown)	5
58	73	**IF EVER I SEE YOU AGAIN** ROBERTA FLACK/Atlantic 3483	3
59	63	**I WANT YOU TO BE MINE** KAYAK/Janus 274	7
60	64	**EVERYBODY DANCE** CHIC/Atlantic 3469	6
61	68	**THANK GOD IT'S FRIDAY** LOVE & KISSES/Casablanca 925	5
62	69	**YOU CAN'T DANCE** ENGLAND DAN & JOHN FORD COLEY/Big Tree 16117 (Atl.)	3
63	65	**YOU KEEP ME DANCING** SAMANTHA SANG/Private Stock 188	3
64	66	**OVER THE RAINBOW** GARY TANNER/20th Century 2373	4
65	70	**PORTRAIT (HE KNEW)** KANSAS/Kirshner 4276 (CBS)	3
66	74	**WILL YOU LOVE ME TOMORROW** DAVE MASON/Columbia 3 10749	3
67	76	**I'M NOT GONNA LET IT BOTHER ME TONIGHT** ATLANTA RHYTHM SECTION/Polydor 14484	2
68	79	**HOT LOVE, COLD WORLD** BOB WELCH/Capitol 4588	2
69	78	**MAGNET AND STEEL** WALTER EGAN/Columbia 3 10719	3
70	71	**SO HARD LIVING WITHOUT YOU** AIRWAVES/A&M 2032	6
71	34	**IF I CAN'T HAVE YOU** YVONNE ELLIMAN/RSO 884	18
72	82	**CAN WE STILL BE FRIENDS** TODD RUNDGREN/Bearsville 0324 (WB)	2
73	87	**SONGBIRD** BARBRA STREISAND/Columbia 3 10756	2
74	77	**TRANS-EUROPE EXPRESS** KRAFTWERK/Capitol 4460	3

CHARTMAKER OF THE WEEK

75	—	**PROVE IT ALL NIGHT** BRUCE SPRINGSTEEN Columbia 3 10763	1

76	85	**LOVE OR SOMETHING LIKE IT** KENNY ROGERS/United Artists 1210	3
77	89	**STUFF LIKE THAT** QUINCY JONES/A&M 2043	2
78	86	**I DON'T WANNA GO** JOEY TRAVOLTA/Millennium 615 (Casablanca)	2
79	83	**ANYTIME** JOURNEY/Columbia 3 10757	2
80	81	**UNDER THE BOARDWALK** BILLY JOE ROYAL/Private Stock 192	4
81	99	**SHAME** EVELYN "CHAMPAGNE" KING/RCA 11122	3
82	—	**BOOGIE, OOGIE OOGIE** A TASTE OF HONEY/Capitol 4565	1
83	84	**(LET'S GO) ALL THE WAY** WHISPERS/Solar 11246 (RCA)	4
84	93	**DAYLIGHT AND DARKNESS** SMOKEY ROBINSON/Tamla 54243 (Motown)	4
85	88	**GEORGIA ON MY MIND** WILLIE NELSON/Columbia 3 10740	3
86	—	**NEVER LET HER SLIP AWAY** ANDREW GOLD/Asylum 45489	1
87	—	**CLOSE THE DOOR** TEDDY PENDERGRASS/Phila. Intl. 8 3648 (CBS)	1
88	90	**SOMEONE TO LAY DOWN BESIDE ME** KARLA BONOFF/Columbia 3 10751	3
89	—	**RIVERS OF BABYLON** BONEY M/Sire/Hansa 1027 (WB)	1
90	94	**THAT ONCE IN A LIFETIME** DEMIS ROUSSOS/Mercury 73992	3
91	92	**DUKEY STICK (PART ONE)** GEORGE DUKE/Epic 50531	4
92	42	**COUNT ON ME** JEFFERSON STARSHIP/Grunt 11196 (RCA)	15
93	96	**HE'S SO FINE** JANE OLIVOR/Columbia 3 10724	3
94	91	**WEEKEND LOVER** ODYSSEY/RCA 11245	6
95	98	**RUNAWAY LOVE** LINDA CLIFFORD/Curtom 0138 (WB)	3
96	—	**NEW ORLEANS LADIES** LOUISIANA'S LE ROUX/Capitol 4586	1
97	44	**CAN'T SMILE WITHOUT YOU** BARRY MANILOW/Arista 0305	20
98	—	**CHATTANOOGA CHOO CHOO** TUXEDO JUNCTION/Butterfly 1205	1
99	—	**YOU DON'T LOVE ME ANYMORE** EDDIE RABBITT/Elektra 45488	1
100	43	**MOVIN' OUT (ANTHONY'S SONG)** BILLY JOEL/Columbia 3 10708	14

Top Soul Hits

Now	Was		
1	1	USE TA BE MY GIRL	THE O'JAYS/Phila. Intl. 8 3642
2	2	THE GROOVE LINE	HEATWAVE/Epic 8 50524
3	3	TAKE ME TO THE NEXT PHASE (PT. 1)	ISLEY BROS./T-Neck 2272
4	7	RUNAWAY LOVE	LINDA CLIFFORD/Curtom 0133
5	4	DUKEY STICK (PART ONE)	GEORGE DUKE/Epic 8 50531
6	16	SHAME	EVELYN CHAMPAGNE KING/RCA 11122
7	5	TOO MUCH, TOO LITTLE, TOO LATE	JOHNNY MATHIS/DENIECE WILLIAMS/Columbia 3 10693
8	6	ON BROADWAY	GEORGE BENSON/Warner Bros. 8542
9	9	DANCE ACROSS THE FLOOR	JIMMY "BO" HORNE/SHS 1003
10	18	STUFF LIKE THAT	QUINCY JONES/A&M 2043
11	27	CLOSE THE DOOR	TEDDY PENDERGRASS/Phila. Intl. 8 3648
12	13	DAYLIGHT AND DARKNESS	SMOKEY ROBINSON/Tamla 54293
13	14	(LET'S GO) ALL THE WAY	WHISPERS/Solar 11246
14	17	ANNIE MAE	NATALIE COLE/Capitol 4572
15	8	STAY	RUFUS/CHAKA KHAN/ABC 12349
16	11	MS	DAVID OLIVOR/Mercury 73973
17	10	OH WHAT A NIGHT FOR DANCING	BARRY WHITE/20th Century 2365
18	23	SHADOW DANCING	ANDY GIBB/RSO 893
19	12	EVERYBODY DANCE	CHIC/Atlantic 3469
20	21	AIN'T NO SMOKE WITHOUT FIRE	EDDIE KENDRICKS/Arista 0325

Top Country Hits

Now	Was		
1	2	NIGHT TIME MAGIC	LARRY GATLIN/Monument 45 249
2	4	TWO MORE BOTTLES OF WINE	WILLIE NELSON/Columbia 3 10704
3	1	GEORGIA ON MY MIND	WILLIE NELSON/Columbia 3 10704
4	8	I'LL BE TRUE TO YOU	OAK RIDGE BOYS/ABC 12350
5	11	IT ONLY HURTS FOR A LITTLE WHILE	MARGO SMITH/Warner Bros. 8555
6	6	GOTTA QUIT LOOKIN' AT YOU BABY	DAVE & SUGAR/RCA 11251
7	13	I CAN'T WAIT ANY LONGER	BILL ANDERSON/MCA 40893
8	3	DO YOU KNOW YOU ARE MY SUNSHINE	STATLER BROTHERS/Mercury 55022
9	10	COWBOYS DON'T GET LUCKY ALL THE TIME	GENE WATSON/Capitol 4556
10	15	I BELIEVE IN YOU	MEL TILLIS/MCA 40900
11	18	IT'S A HEARTACHE	BONNIE TYLER/RCA 11249
12	12	I'M GONNA LOVE YOU ANYWAY	CRISTY LANE/LS GRT 156
13	16	SLOW AND EASY	RANDY BARLOW/Republic 017
14	5	PUTTIN' IN OVERTIME AT HOME	CHARLIE RICH/United Artists 1193
15	25	THERE AIN'T NO GOOD CHAIN GANGS	JOHNNY CASH & WAYLON JENNINGS/Columbia 3 10742
16	17	I WISH I LOVED SOMEBODY ELSE	TOM T. HALL/RCA 11253
17	23	I NEVER WILL MARRY	LINDA RONSTADT/Asylum 45479
18	20	LET ME BE YOUR BABY	CHARLY MCCLAIN/Epic 8 50525
19	22	HERE COMES THE REASON I LIVE	RONNIE MCDOWELL/Scorpion GRT 159
20	26	WEEKEND FRIEND	CON HUNLEY/Warner Bros. 8572

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